ASBESTOS HEALTH EFFECTS CONFERENCE Risk Assessment Issues

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U.S. EPA's Integrated Risk Information System (IRIS)

- Hazard assessment
- Dose-response assessment
- Summaries are based on either toxicologic profiles or full health assessments
- These documents undergo internal and external peer reviews
- Agency consensus review
- Present non-cancer health effects and daily allowable reference levels
- Present cancer health effects and risk per unit exposure over lifetime
- IRIS does not present any exposure assessment

Current Asbestos Summary on IRIS

- All types of asbestos fibers are treated equally for potency
- Only cancer health effects are characterized
- Unit risks are presented for lung cancer and mesothelioma
- No information on non-cancer effects

Issues to be Considered in Health Assessment Update

- Definition of asbestos
- Bioactivity, fiber size, chemistry, durability
- Should serpentine and amphiboles have separate health effect assessments
- Use of mechanistic information for dose response and low dose extrapolation
- Most appropriate measure of environmental exposures (PCM, TEM, SEM) and internal dose (lung burden)
- Non-cancer health effect assessment